

Claims

[c1] 1. An electrical distribution box with compacting system for its integral elements, suitable for being used in automobiles made up of a body of a box, able to insulatedly house the components which make up the electrical distribution system of the vehicle, in the form of each printed circuit board and an element of cover for the body of the box, suitable for providing said body of the box with an isolation for its internal field, and which has the means of fixing to cooperate with the means of fixing the body of the box in the fixing and isolation of the components of the system of electrical distribution, characterized by the separating object it has for the components of the system of electrical distribution, in the form of a laminated board which has on each one of its surfaces a protuberance in the form of a horn, coaxials between them and in a position which corresponds to the position of the shafts of the body of the box and of the covering element, which house an assistant axial passage and which on said surfaces has a number of troncoconic protuberances suitable for coming into contact with said boards, keeping them at a distance.

- [c2] 2. Electrical distribution box, according to claim 1, characterized because the cooperating fixing means of the body of the box are made up of a centered and solitary vertical shaft of its end surface, suitable for providing a support base for the components of electrical distribution and establishing a separation between them and the body of the box.
- [c3] 3. Electrical distribution box, according to claim 2, characterized because the subjection means have a housing for receiving a thread on an axial blind passage which has a means of tightening.
- [c4] 4. Electrical distribution box, according to claim 2, characterized because the subjection means have a number of cylindrical objects distributed jointly on the aforementioned end surface, able to cooperate in the maintenance of the aforementioned components, and exert pressure on them.
- [c5] 5. Distribution box, according to claim 3, characterized because said tightening means is a screw.
- [c6] 6. Distribution box, according to any of the above claims, characterized because the cooperating fixing means of the covering element are made up of a solitary shaft of its interior surface, in a position which corre-

sponds to the position of the shaft of the body of the box, which has an assistant axial passage enlarged in a portion adjacent to the external surface, with a step forming between two portions of passage.

- [c7] 7. Distribution box, according to claim 6, characterized because the first of said portions of passage is suitable for receiving the body of a screw and the second of said portions of passage is suitable for housing the head of said screw, so that this is placed on said step.
- [c8] 8. Distribution box, according to any of the above claims, characterized because said shaft establishes a separation between the different components and the wall of the cap and exerting pressure on them to realize their fixing, also having a number of cylindrical objects distributed jointly on the aforementioned interior surface, able to cooperate, together with the shaft, in the maintenance of the aforementioned components, and of exerting pressure on them.
- [c9] 9. Distribution box, according to any of the above claims, characterized because the printed circuit boards has a passage suitable for allowing the body of a screw through, this being in a position which corresponds to the position of the aforementioned shafts of the body of the box and of the cap element.

- [c10] 10. Electrical distribution box, according to any of the above claims, characterized because the printed circuit boards has reserves on the conductor material of the circuit suitable for allowing contact with the cylindrical objects of the body of the box and the cap element on its basic substratum.
- [c11] 11. Electrical distribution box, according to any of the above claims, characterized because the screw has a cylindrical body, a cylindrical head and a threaded end, it being suitable for being introduced into the lowest diameter passage of the shaft of the cap element, through the adjacent printed circuit board, between the separating element and through the second printed circuit board, until a thread is housed in the threaded passage of the shaft of the body of the box, and its supported by the step formed between the first and second level of the passage of the shaft of the cap element, and exerting traction on the body of the box so that between both shafts, they put pressure on the intervening elements, creating a compacting between them, helped by the cylindrical objects.